

# Parasite Prognosticators Experimental Design Diagram

**Title:** The Effect of Remedies on Soft Scale Insects on Dieffenbachia Plants

**Hypothesis:** **Alternate Hypothesis**  
*Store bought pesticides will be more effective than home remedies in removing Scale Insects.*

**Null Hypothesis**  
 Home remedies and store bought pesticides will have the same effect on the Scale Insects

**Independent Variable:** Type of remedy

Levels of Remedies	Home Remedy (70% alcohol solution)	Store Bought Pesticide (1:100 solution of horticultural oil and water)	No Remedy (Control Leaf for Oil)	No Remedy (Control for Alcohol)
# of Trials	1	1	1	1
Control			Control	Control

**Dependent Variable:** Decrease in honeydew production compared to the control on each leaf

**Operational Definition of the Dependent Variable:** Difference in mass of honeydew between remedy and control side.

**Constants:** Placement of plant  
 Plant (Dieffenbachia)  
 Placement of plastic trays  
 Soil  
 Ratio of each of the remedies (1:100 for horticultural oil:water; 87.5:12.5 for alcohol:water)  
 Sunlight